Section 11 - Mechanical Assemblies

This section describes important mechanical procedures related to the Workstation. It is organized as follows:

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Replacement of Instant Film/Paper Printer

The following paragraphs describe how to replace the Instant Film/Paper (Onboard) Printer in the OEC Workstation.

Remove Old Printer

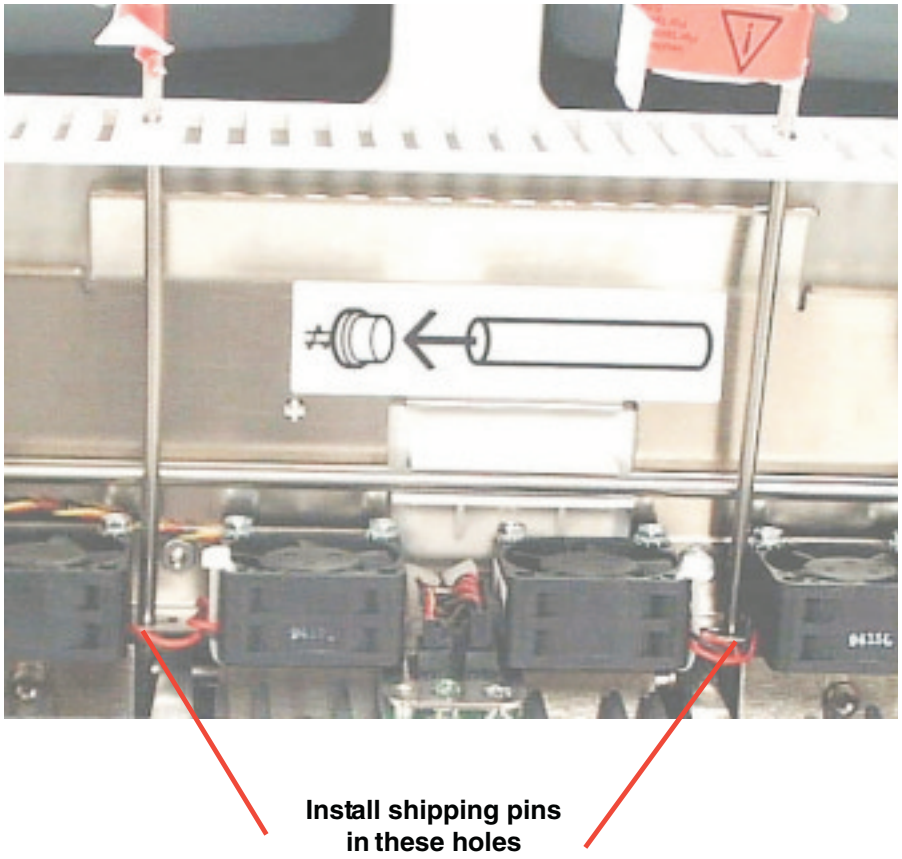
WARNING: *Printer is very heavy. Get assistance when lifting or moving it.*

WARNING: *Be sure to disconnect Workstation from AC line before working on printer. Dangerous electrical shock may otherwise result.*

1. Press Workstation's power pushbutton to turn Workstation OFF.
2. Disconnect Workstation's AC power plug from wall outlet.

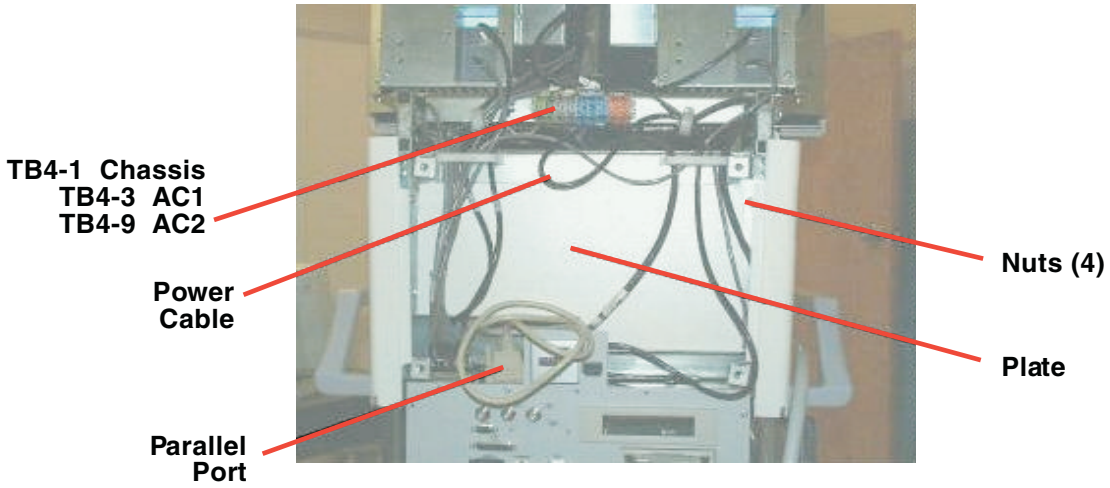
Note: *Shipping pins prevent printhead from impacting platen during shipment. Install them whenever you move or ship printer.*

3. If they are available, install two shipping pins into printer. Make sure each shipping pin aligns with its guide hole before pushing pin into place. Push each pin in firmly until it locks.



How to Install Shipping Pins

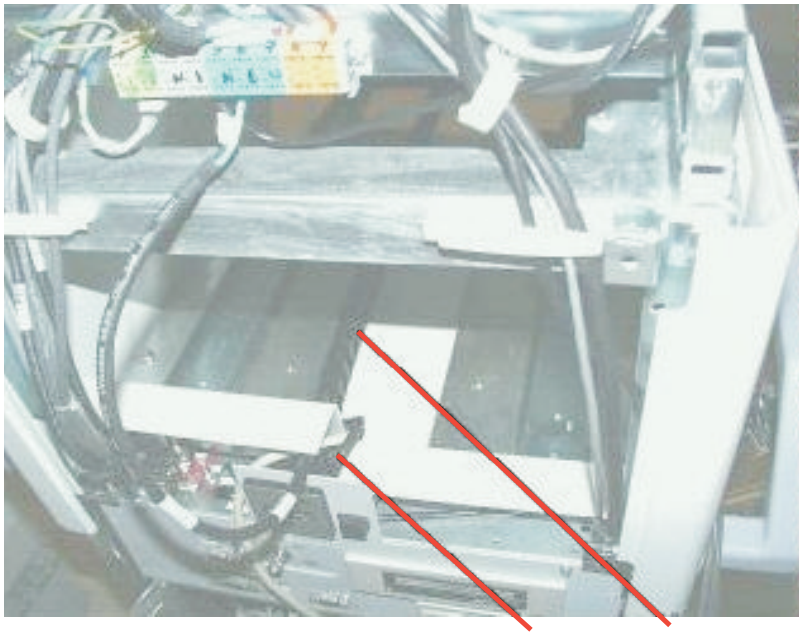
4. Loosen eight quarter-turn fasteners that secure **rear Workstation cover** to Workstation. Remove rear cover.
5. Disconnect printer's 37-pin D-type parallel connector from J3 at rear of Workstation.
6. Disconnect three printer power cord wires from terminal block TB4 located below Workstation monitors: TB4-1 (CHASSIS - GRN/YEL), TB4-3 (AC1 - BLU), and TB4-9 (AC2 - BRN).



Workstation with Rear Cover Removed

7. Remove media tray from printer.

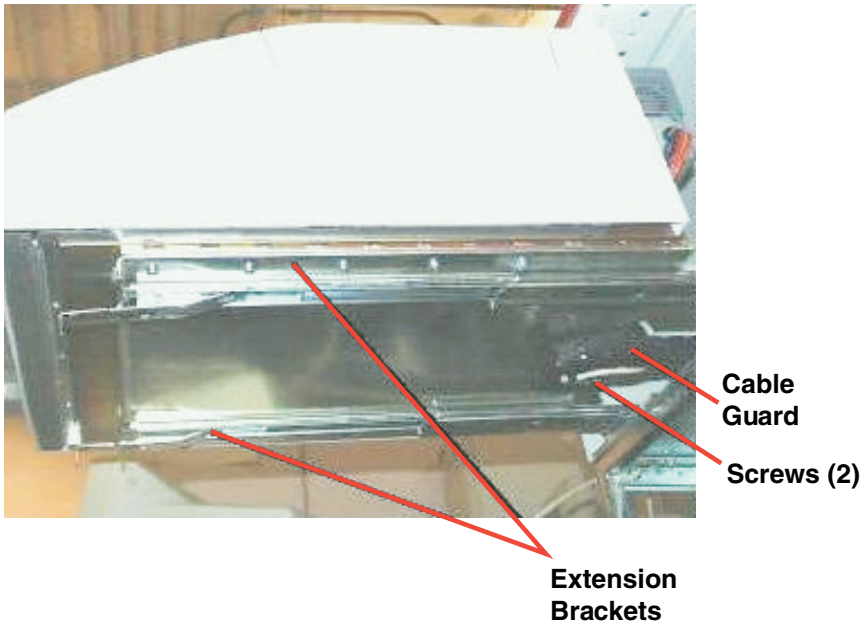
8. Lift up on printer's extension bracket release levers and withdraw printer from Workstation cabinet until extension brackets reach their mechanical stops.



Cable Guard and Extension Bracket Details

9. To gain access to back of printer, remove four nuts that secure metal plate to rear of Workstation. Free metal plate from Workstation cabinet by pushing it toward printer. Turn loosened plate sideways and carefully pull it out opening at rear of Workstation.

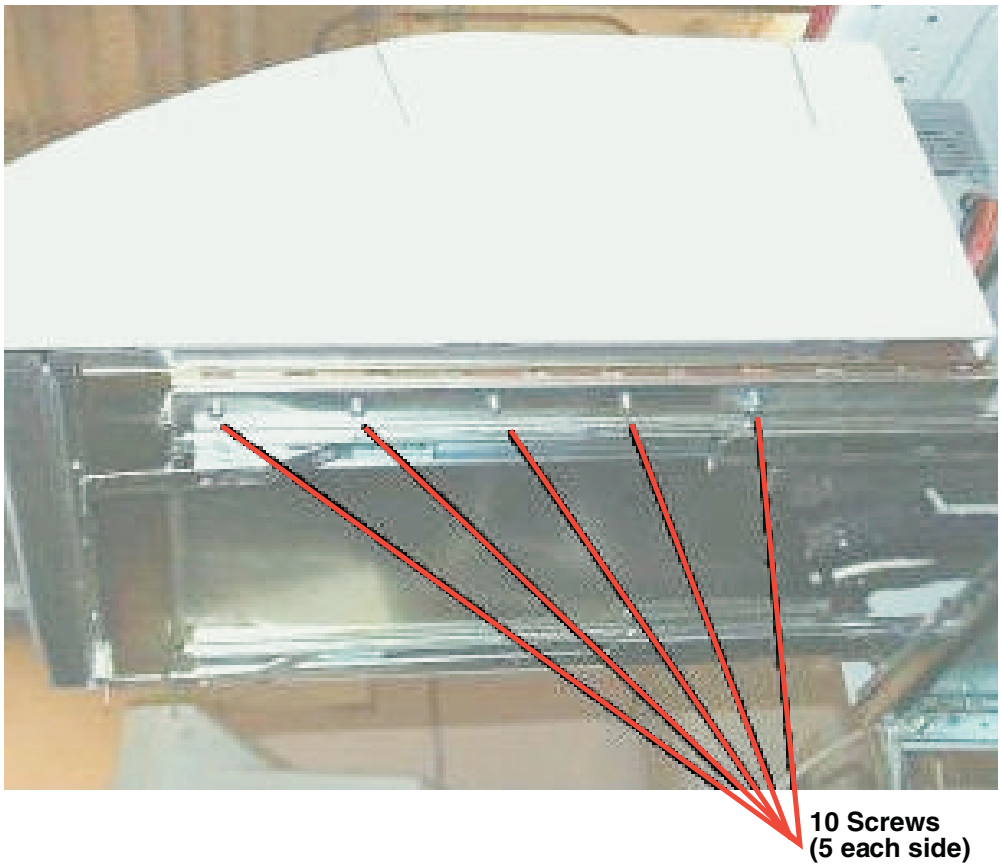
10. Remove two screws and two washers that secure cable guard mounting bracket to rear of Workstation cabinet. Leave bracket attached to cable guard. Retain screws and washers for reuse.



Cable Guard Mounting Details

11. Remove two screws that secure cable guard to extension mounting plate underneath printer. Torx bit in ratchet gives best access to screws. Retain screws for reuse.

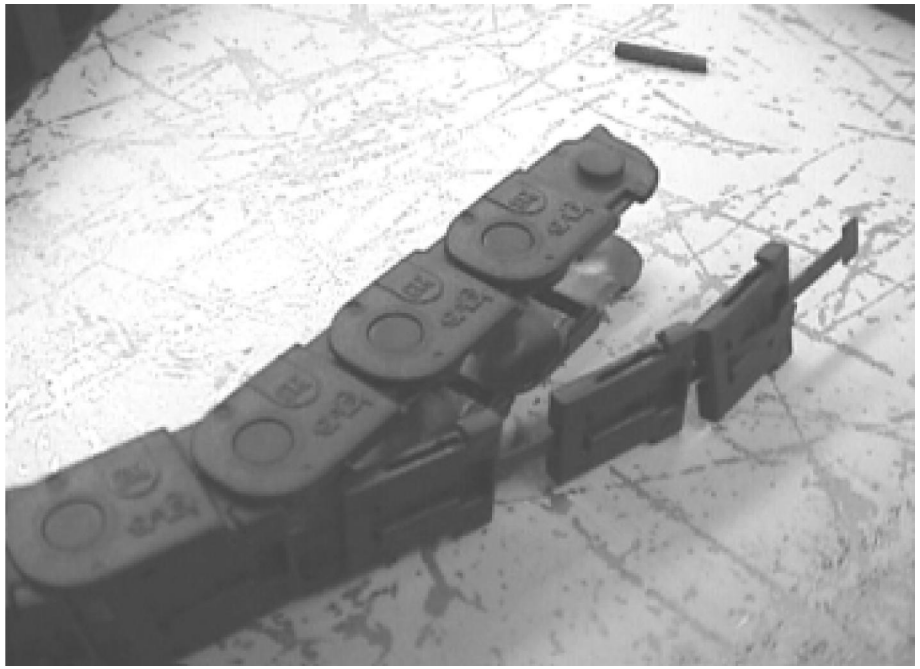
12. Remove ten screws that secure printer to extension mounting plate. There are five screws on each side of printer.



Printer Mounting Screws

13. Remove printer and cable guard from Workstation.

14. Peel side of cable guard off. Remove end link from each end of guard, and retain for reuse. Remove old power cable and old parallel port cable from disassembled cable guard.



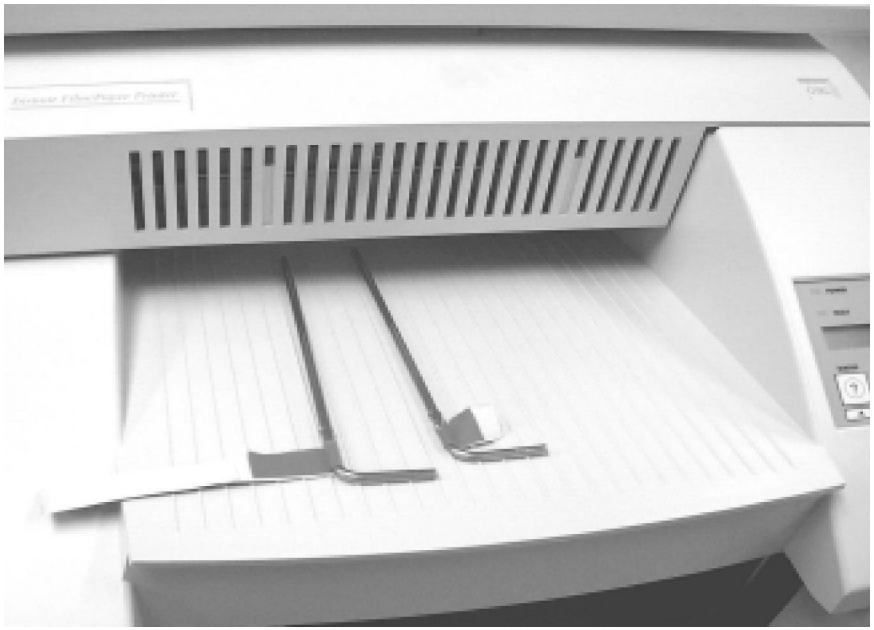
Cable Guard With End Link Removed

***WARNING**: Do not set the printer on its power supply, which is located on the back panel. Damage to the power supply may otherwise occur.*

Unpack New Printer

***Note**: Pay attention to orientation of new printer in shipping box so you can properly pack old printer for shipment.*

1. Remove new printer and shipping base from shipping box. Save all packing material so you can use it to ship old printer.
2. Remove screws that secure printer to shipping base. Save screws and shipping base for reuse.
3. Remove shipping pins from new printer.



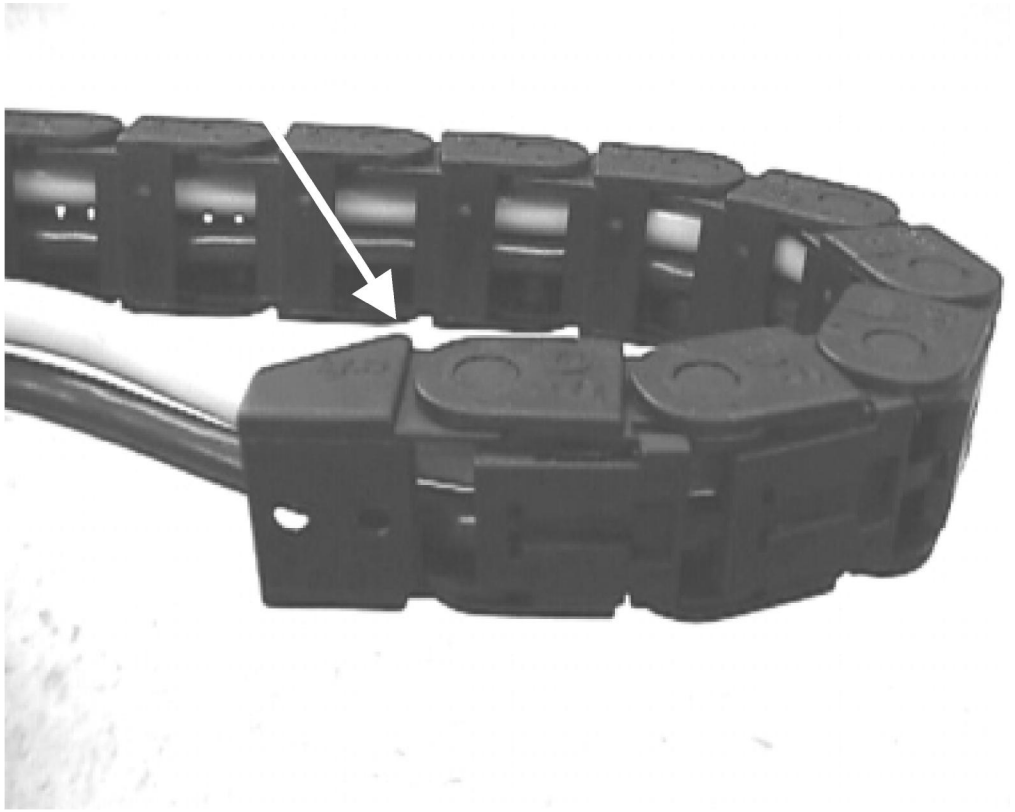
Shipping Pins Removed From New Printer

4. If necessary, insert shipping pins you removed from new printer into old printer to secure printhead and prevent damage during transport. Make sure shipping pins align and seat properly as described on page 2.

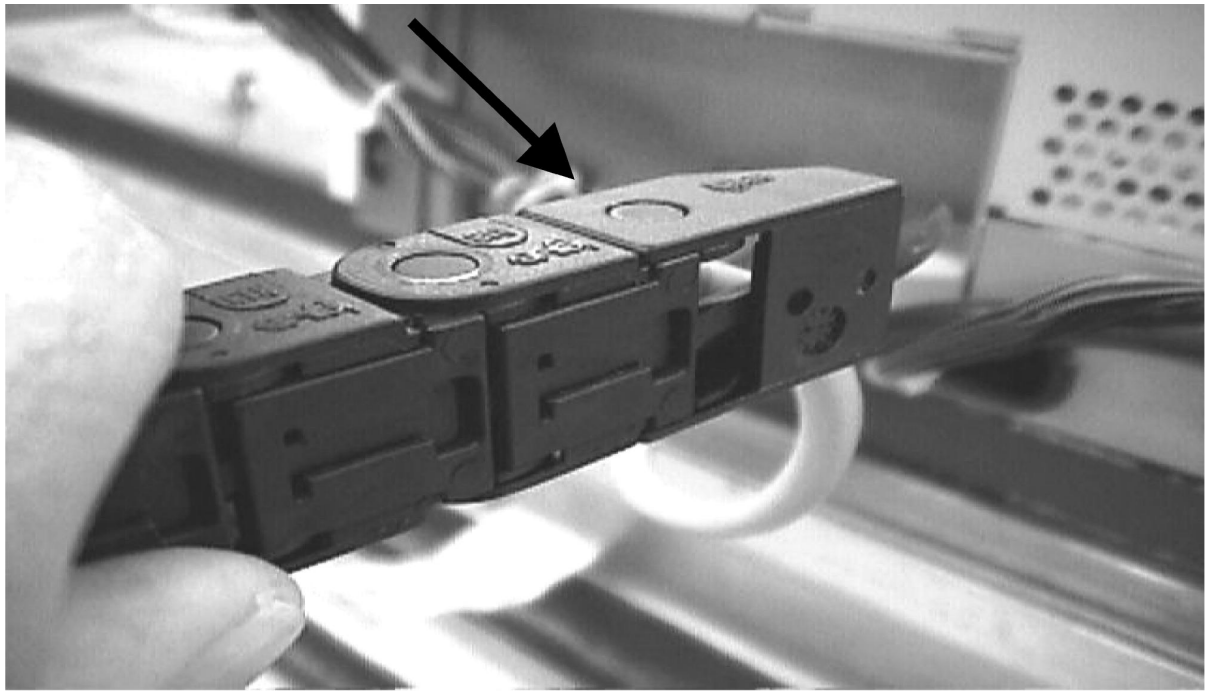
Shipping Pins Installed in Old Printer

Install New Printer

1. Place new printer's power cable and parallel port cable into cable guard and snap cable guard back together.
2. Attach end links to cable guard as shown next.



Cable Guard End That Attaches Under Printer



Cable Guard End That Attaches at Rear of Workstation Cabinet

3. If necessary, reinstall bracket on end of cable guard that attaches at rear of Workstation cabinet.
4. Lift new printer onto extension bracket mounting plate and secure it by installing five screws on each side of the printer (10 screws total).
5. Use two torx screws to connect cable guard underneath the printer.
6. Use two torx screws and two washers to connect cable guard bracket at rear of the Workstation cabinet (figure 4).
7. Connect three wires in printer's power cable to TB4: TB4-1 (CHASSIS - GRN/YEL), TB4-3 (AC1 - BLU), and TB4-9 (AC2 - BRN).

8. Connect printer's 37-pin D-type parallel cable to Workstation's parallel port (J3).
9. Reinstall plate at rear of Workstation cabinet. Insert it sideways into the cabinet and then pull it back into place. Carefully route cabling into position around the plate and install the four nuts you removed earlier.

CAUTION: To avoid damage to print media surface, handle it only by the edges when you load it into the cassette tray.

10. Load media into printer's cassette tray and insert tray into printer. Refer to Operator's copy of Instant Film/Paper Printer supplement for instructions if necessary.
11. Verify that printer's ON/OFF switch is ON, and then slowly push printer into Workstation cabinet. Push printer until you feel it latch in place.

Test New Printer

1. Plug Workstation power cord into an active AC receptacle and press Workstation's power pushbutton. Pushbutton lights when power enters the Workstation.
2. After system boots completely, use Image Directory screen to select an image. Follow instructions in Operator's copy of Instant Film/Paper Printer supplement to print an image.
3. When image prints, reinstall Workstation's rear cover and notify appropriate personnel that printer has been replaced.

Return Old Printer

1. Attach shipping base to old printer.
2. Repackage old printer, using care to orient printer properly in shipping container. Reuse plastic container bag and don't ship with media tray installed in printer.
3. If necessary, contact Logistics for disposition instructions.

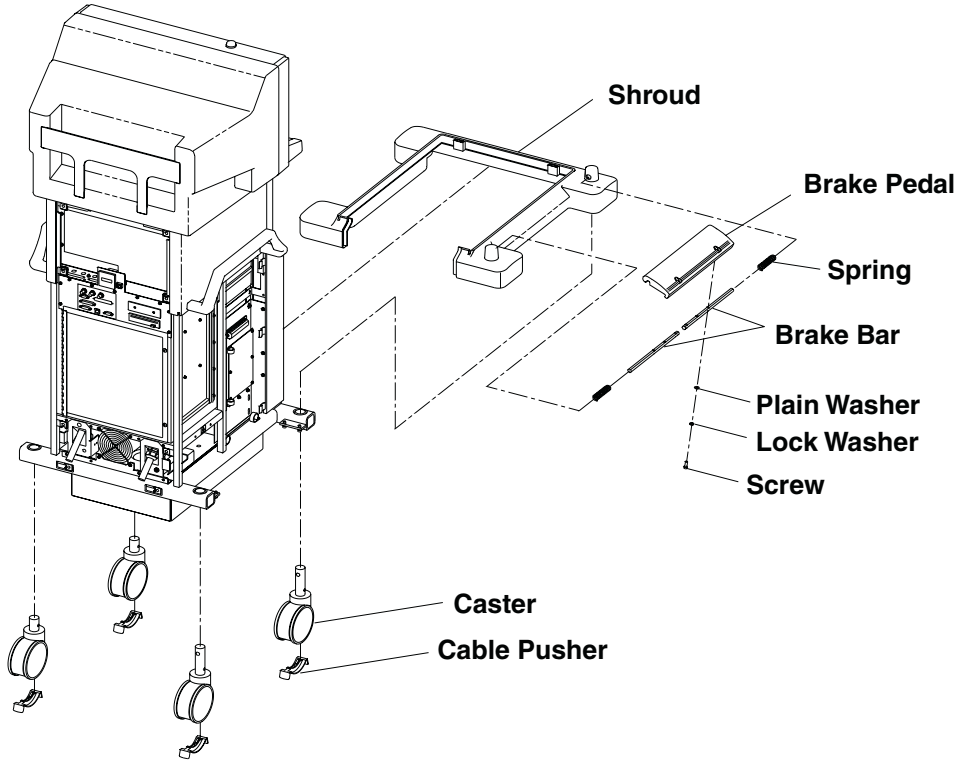
Drag Wire Inspection

A drag wire helps protect Workstation components from electrostatic discharge (ESD) damage. Every time you service or inspect the Workstation, check the drag wire to be sure it is intact, securely mounted, and is not covered with debris. A properly installed and maintained drag wire appears in the following illustration.

Workstation Drag Wire

Workstation Caster Replacement

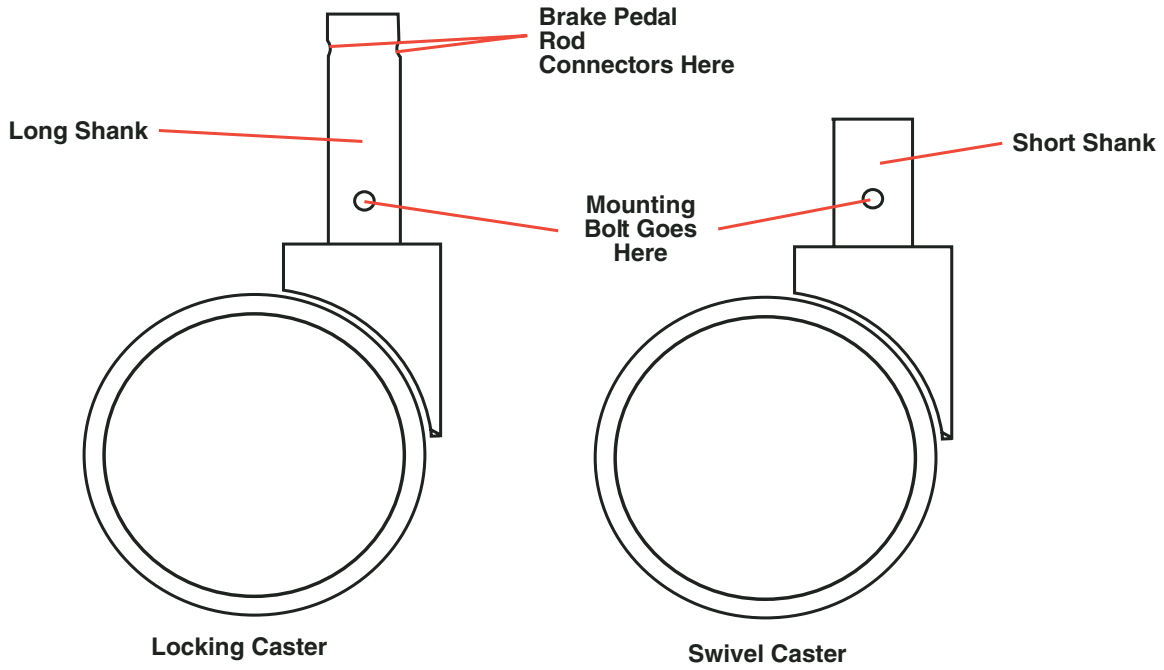
Four pivoting casters support the Workstation, and make it easy and safe for you to roll it across any level surface. Each caster assembly consists of a Locking Caster or a Swivel Caster, and a Cable Pusher. Two casters are controlled by a Brake Pedal, which is described below. The following illustration is an exploded view that shows the casters and Brake Pedal assembly.



Workstation Casters and Brake Pedal

Caster Details

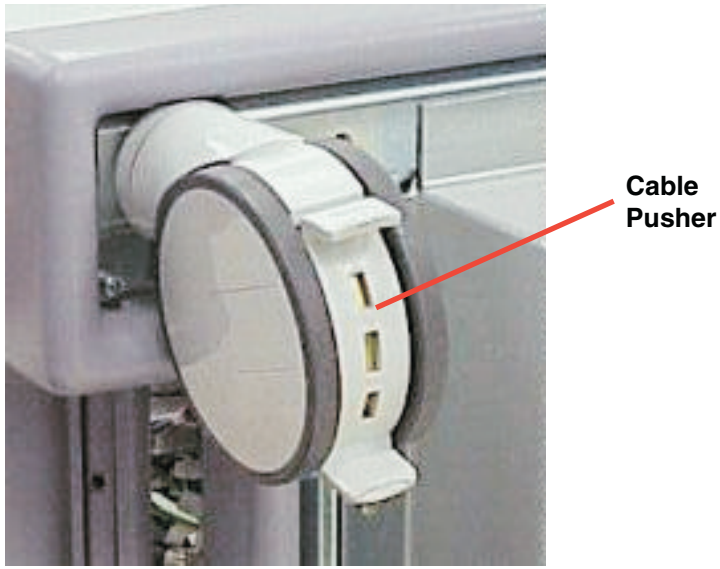
The casters on either side of the Brake Pedal are Locking Casters (OEC Part Number 900696-01) that can be identified by the longer shank. This type of caster contains both a braking mechanism and a pivot lock. The casters on the opposite side of the Workstation are basic Swivel Casters (OEC Part Number 900695-01) that don't brake or have a pivot lock, and have a shorter shank. Both caster types appear in the following illustration.



Workstation Casters

Cable Pushers

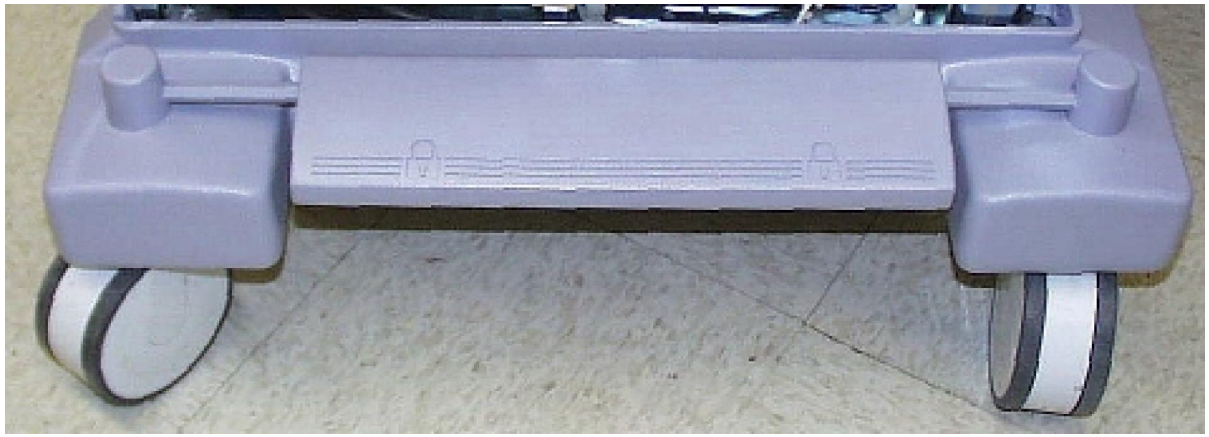
Each Workstation caster is equipped with a Cable Pusher that prevents the Workstation from running over the **Interconnect Cable**, AC power cord, or similar electrical wires. The Cable Pusher clamps onto the caster assembly. You can pry off a broken Cable Pusher by hand or with a flat-tipped screwdriver, and install a new Cable Pusher by simply snapping it in place. A cable pusher appears in the following illustration.



Cable Pusher

Brake Pedal

The brake pedal does more than just stop the Workstation. It is also a steering assist mechanism that locks the pivot on one front caster and one rear caster, pointing them straight ahead so you can roll the Workstation easily down a hallway much like you would a new grocery store cart.



Brake Pedal

Before rolling the Workstation a long distance, lift the Brake Pedal up as far as it will go, orient the Brake Pedal side of the Workstation toward you, and begin pushing the Workstation forward. As the Workstation rolls, the casters nearest you lock into place facing straight ahead, making it much easier to roll the Workstation in a straight line. The casters on the opposite side of the Workstation continue to pivot freely so you can steer the Workstation around obstacles and corners. When you reach your destination, push the brake pedal to the center position so that all four casters pivot freely. After you position the Workstation where you want it, push the brake pedal all the way down to apply the brakes and prevent the Workstation from moving further.

Caster Replacement Procedure

If the Workstation does not move smoothly or easily over a level, hard floor, look for problems with one or more casters. Most often the problem will be debris. If you find a broken caster, replace it as follows:

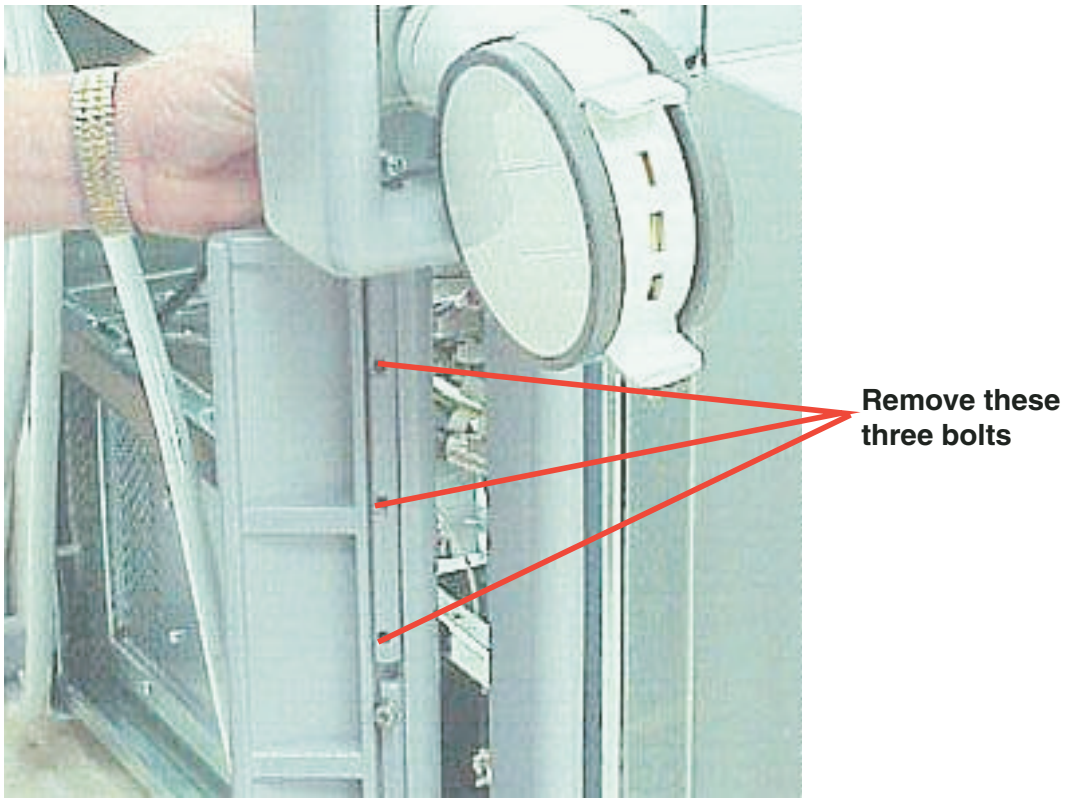
1. Place Workstation power switch in OFF position and disconnect AC plug from wall outlet.
2. Remove all Workstation covers except Monitor Cover.
3. Remove or secure everything that sits on Workstation shelf.

***WARNING**: Workstation is very heavy. Get another person to help you with next step.*

4. Gently tip Workstation over so rear of Workstation rests on floor.

Gaining Access to Casters

5. Remove the three bolts that secure the Brake Pedal to the upper Brake Bar. Be careful not to lose the lockwasher and plain washer on the bolt. This loosens upper Brake Bar so that you can push it down further into the pedal and remove the pedal from the Workstation. Be sure to catch the spring, which will fall when you loosen the upper Brake Bar. Remove the Brake Pedal, both Brake bars, and both springs from the Workstation.

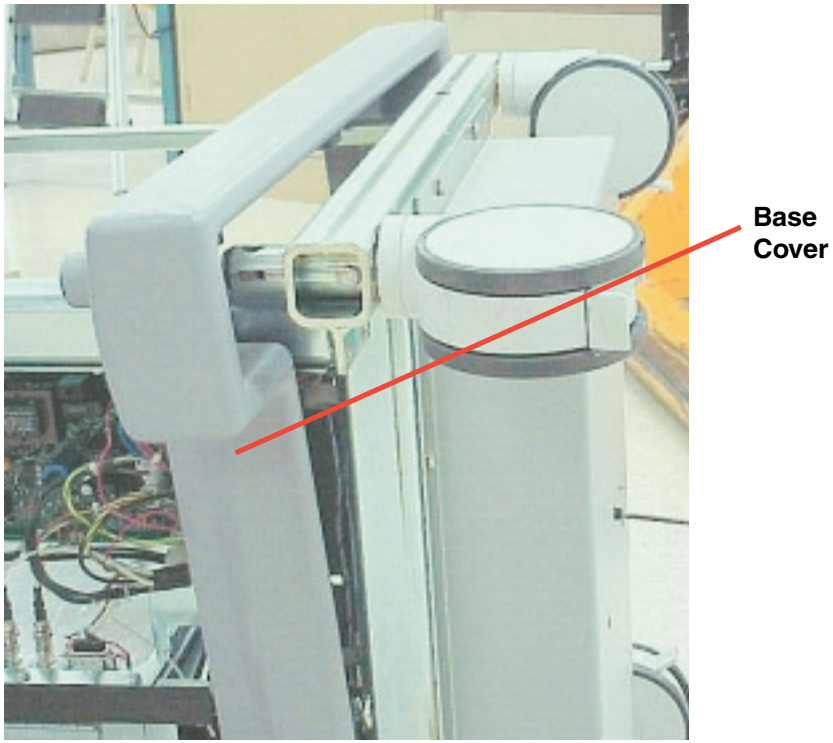


Brake Pedal Removal

6. Loosen and remove mounting hardware that secures Base Cover to Workstation chassis. There are hex nuts located in all corners.

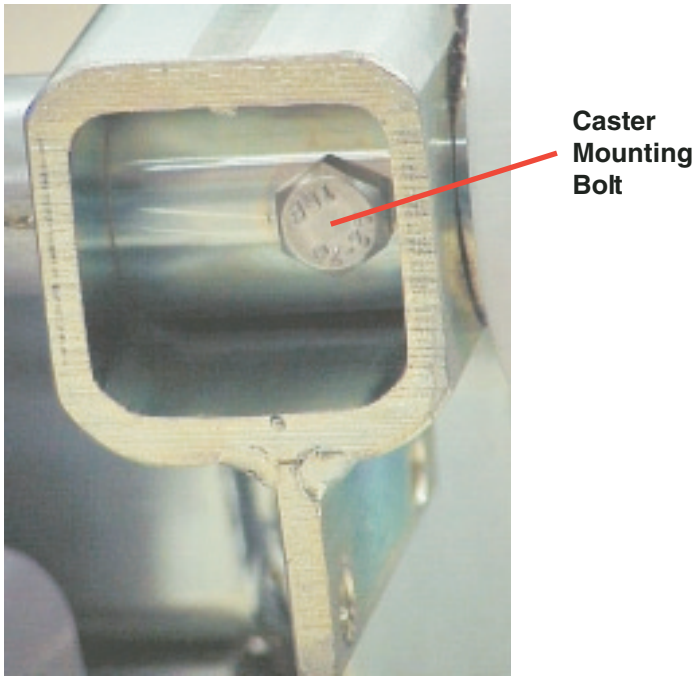
***WARNING**: Workstation is very heavy. Get another person to help you with next step.*

7. Lift Workstation up slightly and slide Base Cover away from casters.



Base Cover Removal

8. Loosen bolt that secures damaged caster to Workstation chassis. Remove bolt and damaged caster.



Caster Mounting Bolt

9. Carefully pry Cable Pusher from damaged caster.
10. Install Cable Pusher on replacement caster.
11. Install replacement caster in Workstation chassis.
12. Clean threads on bolt you removed in step 8. Apply several drops of Locktite 242 to cleaned threads.

13. Install bolt in replacement caster and secure bolt. Ensure replacement caster mounts firmly to Workstation chassis.

***WARNING**: Workstation is very heavy. Get another person to help you with next step.*

14. Lift Workstation up slightly and slide Base Cover back over casters.
15. Install hardware you removed in step 6.
16. Install Brake Pedal you removed in step 5.

***WARNING**: Workstation is very heavy. Get another person to help you with next step.*

17. Set Workstation upright and test new caster for proper operation. Make sure new caster pivots, brakes, and locks like it should.
18. Reinstall any equipment you removed from Workstation shelf.
19. Install all Workstation covers you removed in step 2 and place Workstation back into operation.